

REMARKS

The present Amendment amends claims 13 and 15 and leaves claims 14, 16 and 17 unchanged. Therefore, the present application has pending claims 13-17.

Claims 13-17 stand rejected under 35 USC §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as their invention. Various amendments were made throughout claims 13-17 to bring them into conformity with the requirements of 35 USC §112, second paragraph. Therefore, this rejection with respect to claims 13-17 is overcome and should be withdrawn.

Specifically, amendments were made throughout claims 13-17 to overcome the objections noted by the Examiner in the Office Action.

Claims 13-17 stand rejected under 35 USC §103(a) as being unpatentable over Feldman (U.S. Patent No. 6,148,000) in view of Laubach (U.S. Patent No. 6,028,860). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 13-17 are not taught or suggested by Feldman or Laubach whether taken individually or in combination with each other as suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Claims 13 and 15 clearly recite that the present invention is directed to a method of switching Internet Protocol (IP) packets at a packet switching system.

Particularly, according to the present invention as recited in claim 13, the method includes allocating a Virtual Channel Identifier (VCI) to a pair including an IP address and a port number in Transmission Control Protocol (TCP) or User Datagram Protocol (UDP) and outputting IP packets whose headers have the IP address and the port number via a VC according to the VCI when the packet switching system receives the IP packets.

Further, according to the present invention if IP packets headers have a certain identical part with previously input IP packets, then the allocated VCI is the same as the VCI allocated to the previously input IP packets. Also, if the certain part of the IP packets headers is different from the previously input IP packets, then the allocated VCI is an idle VCI.

Still further, according to the present invention the VCI is included in a virtual path (VP) and all IP packets are transmitted, not according to the VCI, but according to a virtual path identifier (VPI) of the VP by transit nodes in an ATM network.

Claim 15 is similar to claim 13 with the exception that rather than the pair including an IP address and a port number, the pair includes an IP address and information for identifying an application.

The above described features of the present invention now more clearly recited in the claims are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, the above described features of the present invention as now more clearly recited in the claims are not taught or suggested by Feldman or Laubach whether said reference is taken individually or in combination with each other.

Feldman teaches a switch apparatus for receiving and transmitting data units each segmented into a series of cells of data including a first cell and a last cell wherein each of the cells of a series includes a label common to all cells of the series. As per Feldman, at least one incoming port is provided for receiving cells of a plurality of series, at least one outgoing port for transmitting cells out of the apparatus with an outbound label, a storage device for storing a series of cells received at each incoming port until the last cell of a series is received and a device for transmitting each of the series cells sequentially from the first cell to the last cell from the storage device to a selected outgoing port. Feldman teaches, for example, in Figs. 6 and 7 thereof that a VC is established between nodes by using various messages including a VC establishment message and a VC acknowledgment message.

In the Office Action the Examiner alleges that Feldman discloses the claimed method of switching IP packets at a packet switching system including an allocating step. Specifically, the Examiner alleges that:

“Feldman et al disclose...allocating a pair including an IP address and a port number in Transmission Control Protocol (TCP) or User Datagram Protocol (UDP) to a Virtual Channel Identifier (VCI) (col. 2, line 66 to col. 3, line 17 recite assign unique VCI to each node using the IP address as the unique VCI value and col. 16, lines 22-29 recite allocating channel VC, i.e., port number to VCI)”.

Applicants hereby submit that Feldman may teach the allocating of a VCI to an IP address. However, Applicants submit that this is the only teaching in Feldman similar to that of the present invention. Particularly, Applicants submit that Feldman fails to teach or suggest allocating a VCI to a pair including an IP address and a port number in TCP or UDP or information

for identifying an application as in the present invention as recited in the claims.

Applicants specifically note in the passage at col. 16, lines 22-29 of Feldman that there is absolutely no teaching or suggestion of the use of a port number in TCP or UDP or information identifying an application as in the present invention as recited in the claims. Feldman simply teaches in col. 16, lines 22-29 that:

“the inventive protocol defines the downstream ISR as the allocator of VC labels (VPI/VCI), which are forwarded upstream in the ‘VC establishment’. An enhancement to the inventive protocol alternatively shows an upstream neighbor to allocate the VC label assignment. Neighbors may exchange their acceptable VC ranges and indicate whether they wish to be an upstream allocator of VC labels”.

The above described teaching of Feldman has nothing whatsoever to do with a port number in TCP or UDP or information for identifying an application as in the present invention as recited in the claims. Those of ordinary skill in the art of packet switching communications are well aware of the differences between allocating VC labels and a port number in TCP or UDP and information identifying an application as in the present invention as recited in the claims. The above described passage of Feldman would not be considered by those of ordinary skill in the art as being equivalent to a port number in TCP or UDP or information identifying an application by those of ordinary skill in the art.

Thus, at no point has the Examiner met the limitations as recited in the claims of allocating to a pair including an IP address in a port number in TCP

or UDP or information identifying an application as in the present invention as recited in the claims.

Numerous other arguments were presented distinguishing the features of the present invention as recited in the claims from Feldman in the October 28, 2007 Response and the Remarks of the September 4, 2007 Amendment after final, said arguments of the Response and Remarks being incorporated herein by reference.

In addition to the above, Applicants submit that the present invention as now more clearly recited in the claims provides that all packets are transmitted not according to the VCI but according to a VC of the VP by transit nodes in an ATM network. Such features are also not taught or suggested by Feldman.

Thus, Feldman fails to teach or suggest allocating A Virtual Channel Identifier (VCI) to a pair including an IP address and port number in TCP or UDP or information identifying an application as recited in the claims.

Further, Feldman fails to teach or suggest that all IP packets are transmitted, not according to the VCI, but according to a VPI of the VP, by transit nodes in an ATM network as recited in the claims.

Therefore, Feldman fails to teach or suggest the features of the present invention as recited in the claims.

The above described deficiencies of Feldman are not supplied by any of the other references of record. Particularly, the above described deficiencies of Feldman are not supplied by Laubach.

Laubach is merely relied upon by the Examiner for an alleged that is it well known to provide that all IP packets are transmitted, not according to the

VCI, but according to a virtual path identifier of the VP in an ATM network. However, this feature of has been amended in the current claims to more clearly recite that all packets are transmitted, not according to the VCI, but according to a VPI of the VP by transit nodes in an ATM network. These amended features of the present invention as now recited in the claims are not taught or suggested by Laubach.

In addition, Laubach does not teach or suggest the above described allocating a VCI to a pair including an IP address and a port number in TCP or UDP or information identifying an application as in the present invention as recited in the claims.

Thus, Laubach, the same as Feldman, fails to teach or suggest allocating a virtual channel identifier (VCI) to a pair including an IP address and port number in TCP or UDP or information identifying an application as recited in the claims.

Further, Laubach, the same as Feldman, fails to teach or suggest that all IP packets are transmitted, not according to the VCI, but according to a VPI of the VP by transit nodes in an ATM network as recited in the claims.

Therefore, since each of Feldman and Laubach fails to teach or suggest the features of the present invention as recited in the claims, combining Feldman and Laubach in the manner suggested by the Examiner in the Office Action does not render obvious the claimed invention. Accordingly, reconsideration and withdrawal of the 35 USC §103(a) rejection of claims 13-17 as being unpatentable over Feldman in view of Laubach is respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references utilized in the rejection of claims 13-17.

In view of the foregoing amendments and remarks, applicants submit that claims 13-17 are in condition for allowance. Accordingly, early allowance of claims 13-17 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (520.36259CX1).

Respectfully submitted,

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